Remarks

Applicants have carefully reviewed this Application in light of the Office Action dated December 31, 2001. In order to advance prosecution of this Application, Applicants have amended Claims 13, 18-19, 21, 24-26, 28, and 31-32 to clarify the embodiments of the invention claimed therein.[1] Applicants submit that all of the pending claims are patentably distinguishable over the cited reference. Applicants, therefore, respectfully request reconsideration and favorable action for this Application.

Examiner Interview

Applicants wish to thank the Examiner for conducting a telephone interview with their attorney on March 26, 2002. During the interview, Applicants' attorney and the Examiner discussed whether Claim 1 had adequate support in the specification. No agreement was reached.

Section 112 Rejections

The Examiner rejects Claims 13 and 16-33 under 35 U.S.C. § 112, ¶ 1 for containing subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that, at the time the application was filed, the inventors had possession of the claimed invention. (Detailed Action § 3). Applicants disagree with this rejection.

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[1] Applicants, however, make no admission that, before the amendments, the claims were in such a condition as to violate 35 U.S.C. § 112, ¶ 2. Furthermore, in regards to Claims 13, 18-19, 21, 24-26, and 31-32, Applicants assert that, if anything, the amendments broaden the scope of these claims.

To satisfy the written description requirement, the application must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, the inventors were in possession of the claimed invention. (M.P.E.P. § 2163.02). Moreover, it is not necessary for the subject matter of the claim to be described literally in order for the disclosure to satisfy the written description requirement. (Id.).

Claim 13 is an independent claims that the Examiner asserts lacks sufficient support in the specification. (Detailed Action ¶ 3). In specific, the Examiner indicates that support is lacking for the last element of Claim 13. (Id.). The last element of Claim 13, however, as amended, recites: "transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at a second power level, the second power level less than the first power level, when the quality of the initial signal is superior to a pre-determined threshold and the communication strength is greater than a specified range," and the specification provides ample support for such an operation. For example, the specification teaches that, at least in certain embodiments, a slow hop counter provides an indication of signal quality. (pg. 12, lines 13-16; pg. 13, lines 3-6). To accomplish this, the counter sums line quality indicators from a corresponding line quality monitor over a predetermined amount of time, and, if the counter reaches a value greater than a threshold, indicating an inferior signal quality, a slow hop determination procedure is initiated. (pg. 14, lines 13-29). On the other hand, if the counter is less than the threshold, indicating a superior signal quality, a unit determines whether the RSSI is less than the desired range and, if not, requests the other unit to reduce its

transmission power. (pg. 17, lines 14-26).[2] Applicants submit that these teachings more than adequately convey to one skilled in the art that, as of the filing date, the inventors were in possession of the claimed invention. Accordingly, Applicants respectfully request the Examiner to withdraw the § 112, ¶ 1 rejection of Claim 13.

Claims 16-20 depend from Claim 13, already shown to have adequate support in the specification, and themselves have adequate support. For example, while the Examiner indicates that the last element of Claim 19 has inadequate support in the specification, (Detailed Action ¶ 3), as amended, this element - "transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at the maximum power level when the quality of the initial signal is inferior to the pre-determined threshold and the first power level is a non-maximum power level" - has adequate support. For instance, the specification teaches that, at least in one embodiment, if a slow hop counter is greater than a threshold, and if the other unit is not transmitting at maximum power, the unit requests the other unit to transmit at maximum power. (pg. 16, line 17 - pg. 17, line 13). Moreover, the counter being greater than the threshold indicates inferior signal quality. (pg. 14, lines 13-29).[3] Applicants submit that

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[2] Applicants note that the Examiner appears to believe that the hop counter being less than a threshold indicates inferior signal quality. (Detailed Action ¶ 3). This, however, is not the case, because not having enough poor line indicators during a time frame to exceed a threshold actually indicates superior signal quality.

[3] Applicants note that the Examiner appears to believe that a hop counter being greater than a threshold indicates superior signal quality. (Detailed Action ¶ 3). This, however, is not the case, because having so many poor line indicators during a time

these teachings more than adequately convey to one skilled in the art that, as of the filing date, the inventors were in possession of the claimed invention. As to Claims 16-18 and 20, the Examiner provides no specific indication of why these claims lack sufficient support in the specification, but does indicate that the dependent claims are likewise rejected for being dependent on a rejected base claim. (Detailed Action ¶ 3). Applicants, however, have already shown the rejection of Claim 13 under § 112, ¶ 1 to be improper. For at least these reasons, Applicants submit that Claims 16-20 have adequate support in the specification and, hence, respectfully request the Examiner to withdraw the § 112, ¶ 1 rejection of these claims.

Claim 21 is another independent claim that the Examiner indicates lack sufficient support in the specification. (Detailed Action ¶ 3). In specific, the Examiner indicates that the last element of this claim does not have adequate support. (Id.). But as amended, this element recites "the first component operable to determine a power level for the initial signal, the power level comprising one of a maximum power level and at least one non-maximum power level and to transmit a signal to the second component requesting the second component to transmit a subsequent signal at the maximum power level when the quality of the initial signal is inferior to a pre-determined threshold and the first power level is a non-maximum power level" and, hence, is similar to the one previously discussed for Claim 19. In fact, the Examiner uses the same reasoning for rejecting both claims under § 112, ¶ 1. (Detailed Action ¶ 3). For at least the reasons given with respect to Claim 19, therefore, Applicants submit that the Claim 21 has adequate support in the specification and, hence, respectfully

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frame that the threshold is exceeded actually indicates inferior signal quality.

request the Examiner to withdraw the § 112, ¶ 1 rejection of this claim.

Claims 22-27 depend from Claim 21, already shown to have adequate support in the specification, and themselves have adequate written support in the specification. For example, while the Examiner indicates that the last element of Claim 26 has inadequate support in the specification, for the reasons discussed with respect to Claim 13, the specification has sufficient for the element. As to Claims 22-25 and 27, the Examiner provides no specific indication of why these claims lack sufficient support in the specification, but does indicate that the dependent claims are likewise rejected for being dependent on a rejected base claim. (Id.). Applicants, however, have already shown the rejection of Claim 21 under § 112, ¶ 1 to be improper. For at least these reasons, Applicants submit that Claims 22-27 have adequate support in the specification and, hence, respectfully request the Examiner to withdraw the § 112, ¶ 1 rejection of these claims.

Claim 28 is another independent claim rejected by the Examiner for lack of sufficient support in the specification. (Detailed Action ¶ 3). The Examiner, however, provides no specific basis for rejection Claim 28. (Id.). Applicants assume, however, that the Examiner believes the last element of Claim 28 has inadequate support in the specification because it is of the same genre as the other specifically identified elements. As discussed with respect to Claim 13, however, the specification describes an embodiment where a unit requests another unit to alter transmitter power based on signal quality and power level. For at least these reasons, Applicants submit that the specification provides adequate support for Claim 28 and, hence, respectfully request the Examiner to withdraw the § 112, ¶ 1 rejection of this claim.

Claims 29-33 depend from Claim 28, already shown to have adequate support in the specification, and themselves have

adequate support. For example, while the Examiner indicates that the last element of Claim 31 has inadequate support in the specification, (Detailed Action ¶ 3), for the reasons discussed with respect to Claim 13, the specification teaches at least one embodiment that adequately supports this element. As another example, while the Examiner indicates that the last element of Claim 32 has inadequate written support in the specification, (Detailed Action ¶ 3), for the reasons discussed with respect to Claim 19, the specification teaches at least one embodiment that adequately supports this element. As to Claims 29-30 and 33, the Examiner provides no specific indication of why these claims lack sufficient support in the specification, but does indicate that the dependent claims are likewise rejected for being dependent on a rejected base claim. (Id.). Applicants, however, have already shown the rejection of Claim 28 under § 112, ¶ 1 to be improper. For at least these reasons, Applicants submit that Claims 29-33 have adequate support in the specification and, hence, respectfully request the Examiner to withdraw the § 112, ¶ 1 rejection of these claims.

Section 102 Rejections

The Examiner rejects Claims 28-30 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,249,683 issued to Lundby, et al. ("*Lundby*"). (Detailed Action ¶ 5). Applicants disagree this rejection.

According to the M.P.E.P., for a reference to anticipate a claim, the reference must describe, either expressly or inherently, each and every element of the claim. (M.P.E.P. § 2131). Thus, if a claim contains at least one element that a reference does not teach or suggest, the reference cannot anticipate the claim.

Applicants submit that *Lundby* fails to teach or suggest all of the elements of Claim 28, the independent claim of the rejected set. In particular, nowhere does *Lundby* teach or

suggest "transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at a second power level, the second power level based on the quality and the power level of the initial signal." Indeed, *Lundby* only teaches adjusting power level based on the "received signal-to-noise ratio or the frame error rate." (col. 10, lines 1-2). For at least these reasons, Applicants submit that *Lundby* fails to teach or suggest all of the elements of Claim 28 and, hence, that *Lundby* cannot anticipate it. Accordingly, Applicants respectfully request the Examiner to withdraw the § 102 rejection of this claim.

Claims 29-30 depend from Claim 28, already shown to be allowable over *Lundby*, and contain additional elements to those recited in Claim 28. Because *Lundby* fails to teach or suggest all of the elements of Claim 28, it surely fails to teach or suggest all of the elements of these claims. For at least these reasons, Applicants respectfully request the Examiner to withdraw the § 102 rejection of these claims.

Conclusion

Applicants have made an earnest attempt to place this Application in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request allowance of all pending claims. If the Examiner feels that the prosecution of this Application can be advanced in any manner by a telephone conference, Applicants respectfully request that the Examiner call their attorney at the number listed below.

Although no fees are currently believed to be due, the Commissioner is hereby authorized to charge any additional fees or credit any overpayments to Deposit Account No. 19-2179 of SIEMENS Corp.

Respectfully submitted,

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Date: ~~March~~ April 2, 2002

Attachment A - Marked Up Version of Claims

A marked-up version of the amended claims appears below. For the convenience of the Examiner, all claims have been reproduced whether amended or not. Please amend the claims as follows:

13. **(Twice Amended)** A method for conserving power in a wireless communication system, comprising:

providing communication between a first and second component;

transmitting an initial signal from the first component to the second component at a first power level;

receiving the initial signal from the first component at the second component;

determining **[a line]** **the** quality **[for]** **of** the initial signal at the second component;

determining a communication strength for the initial signal at the second component; and

transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at a second power level, the second power level less than the first power level, when the **[line]** quality **[for]** **of** the initial signal is superior to a pre-determined threshold and the communication strength is greater than a specified range.

16. The method of Claim 13, the first component comprising a mobile unit and the second component comprising a base unit.

17. The method of Claim 13, the first component comprising a base unit and the second component comprising a mobile unit.

18. **(Amended)** The method of Claim 13, determining **[a line]** **the** quality **[for]** **of** the initial signal comprising determining a plurality of successive line quality indicators and summing consecutive line quality indicators over a pre-determined period of time.

19. **(Amended)** The method of Claim 13, further comprising:

determining a power level for the initial signal at the second component, the power level comprising one of a maximum power level and at least one non-maximum power level; and

transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at the maximum power level when the **[line]** quality **[for]** **of** the initial signal is inferior to the pre-determined threshold and the first power level is a non-maximum power level.

20. The method of Claim 19, further comprising:

incrementing an attempt counter at the second component when a request is transmitted for the first component to transmit a subsequent signal at the maximum power level; and

determining a power level for the initial signal comprising determining a value of the attempt counter.

21. **(Amended)** A system for conserving power in a wireless communication system, comprising:

a first component;

a second component for providing wireless communication with the first component and for transmitting an initial signal to the first component at a first power level;

an error detector for the first component, the error detector for determining **[a line]** **the** quality **[for]** **of** the initial signal; and

the first component operable to determine a power level for the initial signal, the power level comprising one of a maximum power level and at least one non-maximum power level and to transmit a signal to the second component requesting the second component to transmit a subsequent signal at the maximum power level when the **[line]** quality **[for]** **of** the initial signal is inferior to a pre-determined threshold and the first power level is a non-maximum power level.

22. The system of Claim 21, the first component comprising a mobile unit and the second component comprising a base unit.

23. The system of Claim 21, the first component comprising a base unit and the second component comprising a mobile unit.

24. **(Amended)** The system of Claim 21, the error detector operable to determine **[a line]** **the** quality **[for]** **of** the initial signal by determining a plurality of successive line quality indicators.

25. **(Amended)** The system of Claim 24, further comprising a slow hop counter for summing consecutive line quality indicators over a pre-determined period of time, the error detector further operable to determine **[a line]** **the** quality **[for]** **of** the initial signal by determining a value of the slow hop counter.

26. **(Amended)** The system of Claim 21, the first component further operable to determine a communication strength for the initial signal and to transmit a signal to the second component requesting the second component to transmit a subsequent signal at a second power level, the second power level less than the first power level, when the **[line]** quality **[for]** **of** the initial signal is superior to the pre-determined threshold and the communication strength is greater than a specified range.

27. The system of Claim 21, further comprising:

an attempt counter for the first component, the attempt counter for indicating whether the second component is transmitting at the maximum power level; and

the first component operable to determine a power level for the initial signal by determining a value of the attempt counter.

28. (**Amended**) A method for conserving power in a wireless communication system, comprising:

providing communication between a first and second component;

receiving an initial signal from the first component at the second component, the initial signal transmitted from the first component at a first power level;

determining a plurality of successive line quality indicators for the initial signal at the second component;

determining **[a line]** **the** quality **[for]** **of** the initial signal at the second component by summing consecutive line quality indicators over a pre-determined period of time; and

transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at a second power level, the second power level based on the **[line]** quality **[for]** **and the power level of** the initial signal.

29. The method of Claim 28, the first component comprising a mobile unit and the second component comprising a base unit.

30. The method of Claim 28, the first component comprising a base unit the second component comprising a mobile unit.

31. **(Amended)** The method of Claim 28, further comprising:

determining a communication strength for the initial signal at the second component; and

transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at the second power level, the second power level less than the first power level, when the **[line]** quality **[for]** **of** the initial signal is superior to a pre-determined threshold and the communication strength is greater than a specified range.

32. **(Amended)** The method of Claim 28, further comprising:

determining a power level for the initial signal at the second component, the power level comprising one of a maximum power level and at least one non-maximum power level; and

transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at the second power level, the second power level comprising the maximum power level, when the **[line]** quality **[for]** **of** the initial signal is inferior to a pre-determined threshold and the first power level is a non-maximum power level.

33. The method of Claim 32, further comprising:

incrementing an attempt counter at the second component when a request is transmitted for the first component to transmit a subsequent signal at the maximum power level; and

determining a power level for the initial signal comprising determining a value of the attempt counter.